

DECISION NOTICE:
CHRONIC WASTING DISEASE MANAGEMENT
PLAN FOR FREE RANGING WILDLIFE IN MONTANA

The Montana Department of Fish, Wildlife & Parks (FWP) has developed an action plan intended to prevent the introduction of Chronic Wasting Disease (CWD) into Montana, to prevent the spread of CWD if it is identified in Montana, and to reduce the prevalence of CWD in specific locations if and when it is found. Actions relating to the *prevention* of CWD into Montana will be implemented as early as the winter of 2005/06 and will continue indefinitely depending on the status of CWD in Montana and any advances concerning the pathogenesis, transmission and potential treatment of CWD. Actions will be taken on a statewide level to prevent the introduction of CWD or the geographic spread of CWD into new areas. Actions related to the *control and/or management* of CWD will be initiated following the diagnosis of CWD in free ranging Montana deer or elk. Those actions will be focused around the location of the first CWD diagnosis in a deer or elk. The CWD Management program will be adaptive in that changes to the program will be instituted as levels of success achieved both in Montana's CWD management program and with programs ongoing in other states are evaluated and the most effective approaches to CWD prevention, reduction, or elimination are identified. A "CWD Task Force" consisting of interagency membership will facilitate modifications to the plan through periodic plan review.

A draft environmental assessment (EA) "Chronic Wasting Disease Management Plan for Free Ranging Wildlife in Montana" was distributed on August 15, 2005. The draft was made available on the FWP public website and at all regional headquarters across Montana. A public comment period was opened at that time with a deadline for public comments of September 23, 2005. In addition, a series of public meetings were held at all seven FWP administrative headquarters as well as in Butte, Montana to allow for public comment.

A total of 18 comments were received during the public comment period. Eleven of those comments were in support of aggressive measures to control CWD should it be found in Montana. Three comments favored less aggressive management actions reasoning that the success of aggressive management in other states has not yet been determined or completely supported by science at this time. Other comments dealt with outlawing "game farming" (1 comment), providing compensation to alternative livestock operators should CWD be found in the area of an alternative livestock ranch (1 comment), or simply submitted reprints concerning mad cow disease and potential public health issues (2 comments).

ELEMENTS OF THE DECISION

A FWP "preferred alternative" was not identified in the draft EA submitted for public comment. While the draft plan presented six general alternatives for management of CWD, site-specific management actions were not developed due to the number of variables dependent on the location of the first finding of CWD in Montana. Those variables include but are not limited to the habitat type, the species diagnosed with CWD, the geologic features in the immediate area, land ownership, and available population data. Following internal review of the draft EA and review of the public comments received by the department, FWP has selected a management plan that incorporates elements of both alternative IV and alternative V from the draft CWD Management Plan. The final decision on specific management of CWD at the diagnosed epicenter will be made by an "epidemiologic team" (epi-team) and based on the variables that the situation presents. Both

alternative IV and alternative V initiate management through the radio collaring of 50 animals and a determination of the “home range” of that set of animals through monitoring by radio-telemetry for 6-9 months. During that initial time period, the epi-team will use all “on the ground” information available to select a management action under either alternative IV or V that best fits the situation. The epi-team will also develop any mitigation measures at that time necessary to reduce effects of the management plan on the environment. Both alternative IV and alternative V are aggressive in their sampling and eradication efforts. Alternative IV operates under a “control at <1%” strategy and alternative V under a “statistical elimination” strategy.

Using the best scientific knowledge available, the management approach selected has been determined to be the most effective in preventing CWD from affecting Montana’s wildlife populations, in managing CWD if it does affect our wildlife populations, in assessing the presence and/or prevalence of CWD in Montana, in providing timely information to the public concerning CWD, and in advancing the current knowledge of CWD through research within the capability of FWP. A summary of the selected alternative is presented below.

Prevention

Baiting and Feeding

Feeding of big game animals has been shown to increase the opportunity for transmission of disease by concentrating animals and potentially increasing disease prevalence. Studies from both Wisconsin and the Canadian Cooperative Wildlife Health Centre have established the role of wildlife feeding in the transmission of disease. Wyoming elk feed grounds have been implicated in the transmission of brucellosis while feeding practices in Michigan have contributed to the spread of tuberculosis in Michigan’s white-tailed deer populations.

Montana’s current restrictions on baiting and feeding of big game animals are covered under MCA 87-3-130 and state that “a person may not provide supplemental food attractants to game animals by purposely or knowingly providing supplemental feed attractants in a manner that results in an artificial concentration of game animals that may potentially contribute to the transmission of a disease or that constitutes a threat to public safety.” That statute could be interpreted as allowing the feeding of big game animals as long as it did not result in an “artificial concentration” of big game animals, “potentially contributing to the transmission of a disease” or “constituting a threat to public safety.”

The FWP preferred alternative suggests legislation to revise the baiting and feeding restrictions such that a stronger message, more enforceable, is incorporated into the laws to prevent baiting and feeding of big game animals.

Carcass Transport

Recent studies in Colorado (Miller, Williams, et. al., 2004) have shown that CWD infected animal carcasses have the capability after more than two years of decomposition to transmit CWD to uninfected animals. Although the role of environmental transmission in the natural epidemiology of CWD is unknown, it may play an important role. Due to this concern, over 25 states have instituted carcass import regulations that prohibit the import of heads and spinal columns of hunter harvested animals taken from states or areas within states that have diagnosed CWD in their wild populations.

Proper disposal of heads and spinal cords in appropriate landfills may significantly reduce the risk of environmental contamination. More efficient risk elimination may be achieved, however, by

prohibiting import into Montana of heads and spinal cords from animals harvested in states or provinces with active CWD. Although enforcement of this prohibition is expected to be difficult, having the prohibition in place is expected to be a more effective deterrent than recommendations currently in place advising hunters against importation of carcasses and carcass parts.

The FWP preferred alternative suggests that regulations be developed through the FWP Commission prohibiting the importation of heads and spinal columns of cervids harvested in states or provinces that have diagnosed CWD in their wildlife populations or from alternative livestock ranches from those states and provinces. A listing of those states and provinces will be posted on the FWP website and in the big game regulations and kept current by FWP personnel. Importation of processed meat, quarters, hides, antlers and/or clean skull caps, ivories, de-boned meat, and finished mounts will still be allowed from those identified states and provinces. The FWP Commission passed a carcass import regulation in February of 2006 to facilitate inclusion of that new regulation in the big game hunting regulations for 2006.

Translocation/Transplantation

Currently, there is no efficient and economical live animal test for CWD. Movement of live cervids within Montana or importation of live cervids from outside Montana presents a risk for introduction or spread of CWD. FWP has recently enacted a policy change eliminating the rehabilitation of orphan elk calves and deer fawns from Montana at the centralized Helena rehabilitation center. In the past, orphan ungulates from all over Montana were centralized at the rehabilitation center and later released back into the area where they originated. This policy change is intended to eliminate potential for the spread of CWD that could occur by mixing CWD infected, and non-infected orphaned animals at the rehabilitation facility and later releasing those animals back to their point of origin.

FWP has not moved live trapped wild cervids within the state since 1997 when elk trapped on the Moiese Bison Range were transplanted to Region One. The preferred alternative will establish a policy through the FWP Directors office restricting the importation or intrastate movement of wild cervids in Montana.

Intrastate and interstate movement of captive cervids (alternative livestock, i.e. game farm animals) is regulated by the Department of Livestock. Intrastate movement is currently restricted by the requirement for negative tuberculosis and brucellosis tests prior to movement. Importation of captive cervids from other states requires not only negative tuberculosis and brucellosis tests for individual animals, but also assurance that the herd of origin has been under an active CWD surveillance plan for 5 years with no incidence of CWD. The FWP preferred alternative suggests that FWP work with the Montana Department of Livestock to critically evaluate current policies concerning import of captive cervids into Montana and/or intrastate movement of captive cervids within Montana.

Carcass Disposal

Environmental contamination through dispersal of heads and spinal columns from butcher waste has the potential to either introduce or spread CWD in wild cervid populations. Evaluations of appropriate carcass disposal methods by the Environmental Protection Agency and by the State of Wisconsin have identified appropriate disposal methods as incineration, alkaline hydrolysis tissue digestion, and burying in municipal solid waste landfills (MSWLF's). The U.S. Environmental

Protection Agency has provided “recommended interim practices for large-scale disposal of potentially contaminated chronic wasting disease carcasses and wastes” in MSWLF’s.

As of March of 2006, Montana has not detected CWD in free-ranging deer or elk through its ongoing surveillance program after testing over 9000 wild cervids. Carcass parts from animals harvested in Montana are therefore considered “low risk” for containing the prion thought to cause CWD and may be disposed of in MSWLF’s as has occurred for decades. Should CWD be detected in Montana, carcass waste of animals harvested from management areas where CWD has been detected could still be disposed of in approved (40CFR Part 258) MSWLF’s according to the EPA’s recommended interim practices. The Montana Department of Environmental Quality, Solid Waste Division regulates and certifies MSWLF’s in the state of Montana and has provided a listing of MSWLF’s classified as Class II sanitary landfills that are qualified to dispose of materials that are potentially CWD contaminated according to the EPA recommended practices. Any carcasses or carcass wastes with confirmed CWD could also be incinerated when possible. The State of Montana (Department of Livestock) owns a portable incinerator. The preferred alternative directs FWP to develop a memorandum of understanding with the Department of Livestock authorizing use of that portable incinerator should a CWD management action be required in a confirmed CWD location. In that case, regulations prohibiting the movement of heads and spinal columns out of that area by the public would necessitate collection and incineration of those prohibited parts on site or movement off-site for incineration.

The FWP preferred alternative recommends that a memorandum of understanding be developed between the Montana Department of Environmental Quality, the Montana Department of Transportation (road killed carcasses) and FWP regarding disposal of carcasses and carcass parts in MSWLF’s. The preferred alternative further recommends that an educational program be developed for the public, meat processors, taxidermists, and MSWLF operators to obtain cooperation in the proper disposal of carcasses and carcass parts.

Surveillance

The potential for success in eliminating CWD is dependent upon timely discovery of CWD in new areas. The longer CWD is present in a particular area, the more opportunity there is for transmission to additional animals and contamination of the environment making elimination of the disease more difficult. Rapid detection of CWD in Montana is critical to the success of management actions. A surveillance program for CWD was initiated by FWP in 1998. That initial program provided broad geographical surveillance for CWD of hunter harvested deer and elk across many areas of Montana. The surveillance program was modified in 2000 with emphasis on hunter harvested sample collection in identified “high risk” areas along Montana’s borders with Wyoming, South Dakota, and Saskatchewan. The statewide collection of targeted samples from animals exhibiting clinical signs consistent with CWD and testing of road-killed animals are additional components of Montana’s surveillance effort. Montana’s effort is part of a nationwide surveillance strategy for CWD with surveillance plans and results reviewed and funding provided annually by USDA/APHIS/Veterinary Services. Montana’s surveillance effort is only partially funded through this National program. Montana received approximately \$90,000 in 2005 from USDA/APHIS for the CWD surveillance with additional funding coming from the FWP budget.

The FWP preferred alternative recommends that the collection of hunter killed samples for CWD surveillance continue with a focus on identified “high risk” areas, and that a program be initiated

to increase the statewide collection of road-killed samples providing an expanded geographical coverage. The preferred alternative also recommends an expanded educational effort so that citizens in the field can identify potentially CWD infected animals. The public will be asked to alert FWP of those animals so that they can be collected and tested for CWD by department personnel. Collection of targeted samples has been shown in other states to be a valuable and effective surveillance technique.

Management

If CWD is detected in Montana's cervid populations through the CWD surveillance program, timely and efficient management actions are intended to eliminate CWD positive animals and prevent more widespread distribution of the disease across the state. Six separate management alternatives were presented in the CWD draft management plan. The effects of each alternative on the physical, biological, and socio-economic environment were evaluated in the draft environmental assessment. Alternatives underwent extensive internal review and review by the public during the environmental assessment process.

FWP has determined that an additional assessment will be necessary following the first (and any subsequent) finding of CWD in Montana to select appropriate management actions. That assessment will determine whether management under alternative IV, "control at <1%" or alternative V "statistical elimination" is most appropriate in a particular area based on conditions present in the area. This assessment will be done by an epidemiologic team (epi-team) and will evaluate geological features, habitat, land ownership and access potential, cervid population parameters, and other relevant information. The department has developed an internal policy that defines the timelines, responsibilities, and make-up of the epi-team. Appropriate personnel will be included on the epi-team regarding site evaluation, cervid population evaluation, public involvement and landowner contact. The epi-team will make a final recommendation to the Director of FWP to pursue either alternative IV or alternative V as a management action. Either alternative, once initiated, incorporates progressive actions based on the results of data obtained during initial management actions. A summary of the actions included in the preferred alternative is given below:

1. Fifty deer (or elk) will be captured and radio-collared in the vicinity of the initial CWD case in Montana and a tonsil biopsy obtained from all radio-collared deer. Tonsil samples will be analyzed for CWD and, if any are positive, those animals will be located and euthanized. If 5% or more of the radio collared deer are positive for CWD, an immediate population reduction effort will be conducted to achieve a 50% population reduction within estimated population boundaries. If <5% of the radio-collared deer are CWD positive, the management action progresses to step #2.
2. An epidemiological team will be convened to evaluate on the ground conditions in the area of the CWD finding. Depending on their findings, a recommendation will be made to the Director of FWP to either control CWD in the immediate area (alternative IV) or to attempt to eliminate any evidence of CWD in the involved population (alternative V).
3. Radio-collared animals will be followed by radio-telemetry for 6-9 months to determine their home ranges and migration patterns. Using that information, a "population boundary" will be established and a population estimate made of total animals within that boundary.
4. Based on that population estimate, obex and retropharyngeal lymph nodes will be collected from a sufficient number of animals 6 months or older to detect CWD at a 1% incidence

with a 99% confidence level. Samples will be collected from hunter-harvested animals when possible with additional samples collected by agency personnel or cooperating agencies if necessary to achieve required sample numbers. Sample collections may take place over a 1-year period. If the statistical sample indicates a >5% prevalence of CWD, an immediate 50% reduction of the management population will be conducted in a population reduction effort. All animals collected will be tested for CWD exposure. If <5% CWD incidence is detected in the sample collected, management of CWD will proceed on the recommendation of the epi-team as a CWD control effort (alternative IV) or as a CWD statistical elimination effort (alternative V). Those two management alternatives are outlined below:

CWD Control (alternative IV)

- a. If the statistical sample collected indicates <1% CWD incidence, the management area will be monitored for 5 years with testing of all hunter harvested animals mandatory. If, at any time during that 5 year period an incidence of >1% CWD incidence is detected in hunter harvested animals, a new statistical sample will be collected over the next year sufficient to determine a 1% CWD incidence at a 99% confidence level.
- b. If the initial statistical sample indicates >1% CWD incidence, a second statistical sample will be collected over the next year to provide detection of CWD at a 1% incidence with a 99% confidence level. Again, samples will be collected from hunter-harvested animals when possible with additional samples collected by agency personnel or cooperating agencies if necessary to achieve required sample numbers. Progressive statistical samples will be collected until the incidence of CWD infection is found to be <1%. Once the CWD incidence is below 1%, the management area will be monitored as in (a).
- c. If, at any time during the above scenarios an infection rate is detected at >5%, a 50% population reduction effort will be conducted in the management area.
- d. Carcasses from animals obtained during agency conducted lethal collections will be held under refrigeration until sample results are obtained. Carcasses testing negative will be given to food banking systems and carcasses testing positive will be incinerated either on site or at an off site location.
- e. Management areas will be maintained for a minimum of 5 years with annual sampling of hunter harvested cervids mandatory and movement of heads and spinal cords out of the management area by the public prohibited. When possible, heads and spinal columns as well as any CWD positive carcasses will be incinerated on-site with a portable incinerator.
- f. CWD test results will be provided to hunters harvesting animals in the management zone as soon as possible. Sample turn-around times are currently estimated at 1 to 2 weeks.

CWD Statistical Elimination (alternative V)

- a. If the statistical sample collected indicates 0% CWD incidence (no positive animals are found), the management area will be monitored for 5 years with mandatory testing of all hunter-harvested animals. If, at any time during that 5-year period a CWD positive animal is detected in hunter harvested animals, a new statistical sample will be collected over the next year sufficient to determine a 1% CWD incidence at a 99% confidence level.

- b. If the statistical sample detects any CWD positive animals, a second statistical sample will be collected over the next year to provide detection of CWD at a 1% incidence with a 99% confidence level. Again, samples will be collected from hunter-harvested animals when possible with additional samples collected by agency personnel or cooperating agencies if necessary to achieve required sample numbers. Progressive statistical samples will be collected until the incidence of CWD infection is found to be 0%. Once the CWD incidence is measured at 0%, the management area will be monitored as in (a).
- c. If, at any time during the above scenarios an infection rate is detected at >5%, a 50% population reduction effort will be conducted in the management area.
- d. Carcasses from animals obtained during agency conducted lethal collections will be held under refrigeration until sample results are obtained. Carcasses testing negative will be given to food banking systems and carcasses testing positive will be incinerated either on site or at an off site location.
- e. Management areas will be maintained for a minimum of 5 years with annual sampling of hunter harvested cervids mandatory and movement of heads and spinal cords out of the management area prohibited. When possible, heads and spinal columns as well as any CWD positive carcasses will be incinerated on-site with a portable incinerator.
- f. CWD test results will be provided to hunters harvesting animals in the management zone as soon as possible. Sample turn-around times are currently estimated at 1 to 2 weeks.

Any management actions required following the discovery of CWD are dependent on the cooperation of the agency or individual who controls or owns land on which the management action is anticipated. Prior to initiating management actions, public meetings will be held in affected areas. Property interest agencies or individuals will be consulted concerning land access issues and involved with planning and implementation efforts. All of these activities to obtain cooperation by potentially affected parties will be conducted by members of the epi-team.

Public Information

Providing accurate information on a timely basis is critical to obtaining the cooperation and support of the general public and other agencies potentially affected by CWD. There are two phases to the public information plan included in the CWD Management Plan. Phase one during the active surveillance period prior to the discovery of CWD in Montana and phase two following the detection of CWD. Phase one involves continual and timely public updates providing surveillance status information and information on any new scientific developments concerning CWD. Included in phase one will be educational efforts concerning proper disposal of carcasses, carcass transport regulations, and national surveillance results. Phase two, in particular the first 10 days following an initial discovery of CWD in Montana, are critical in conveying confidence to the public that FWP has prepared for the event appropriately and is managing the situation using the best science available. The Communication/Education Division of FWP, along with the Wildlife Division, have developed a public information plan to provide current information concerning CWD and to inform the public about any management actions that may take place in Montana. The plan also provides a step-wise protocol for actions required to inform the public and affected agencies following the diagnosis of CWD in Montana.

The FWP preferred alternative recommends acceptance of the draft public information plan as included in the draft CWD Management Plan.

An additional aspect of public information involves providing timely sample results to Montana hunters harvesting cervids. This service becomes more critical once CWD is found in Montana, particularly for cervids harvested within or close to management zones. FWP intends to establish a web-based system, potentially using a bar coding system on big game tags, that would enable hunters to either call in to FWP or log on to the internet to check CWD test results.

Research

Currently, research projects in FWP Region 6 and in FWP Region 7 have provided or are providing demographic information and animal movement information on deer in areas of Montana selected as “high risk” areas for initial CWD diagnosis. Should CWD be found in either of those areas, the information obtained through these studies will be beneficial in establishing movement patterns and population estimates at the initiation of management actions. This type of information is essential to the epidemiologic team in selecting the appropriate management strategy (alternative IV or V) for CWD in a particular location. Baseline information about affected populations would also provide a basis for additional research on disease epidemiology, transmission, and pathogenesis and on the overall effects of an outbreak of CWD on a naïve population.

The FWP preferred alternative recommends an increased research effort to determine cervid population size, composition, density distribution, movement patterns, emigration rates, and habitat use on local levels. Initial research should focus on any additional areas and populations identified as high risk for contacting CWD due to the proximity of CWD infected animals in Montana or in neighboring states and provinces.

The CWD Oversight Committee, charged with the preparation of a CWD management plan, has made additional recommendations concerning research. The committee recommends that FWP create a GIS layer that would summarize seasonal distribution, movement patterns, and home range size for mule deer, elk and white-tailed deer from all past studies employing telemetry. These known locations describing distribution/movements could be used to extrapolate to similar environments where actual data is not available and to predict animal distribution and habitat use for the entire state. These spatial parameters would provide important information allowing the epi-team to model the potential for spread within or from newly identified CWD positive locations. Other spatial layers of importance such as land ownership and vegetation could be assembled in the same project.

The FWP preferred alternative recommends the establishment of a CWD Task Force charged with evaluating research needs, research results, management plan effectiveness, and potential management plan modifications. Makeup of this committee will include members from the FWP Director’s Office, the FWP Research and Technical Services Unit and the FWP Enforcement Division. In addition, membership will include supervisory, wildlife and Conservation/Education personnel from regions where management actions have been initiated and representatives from any Federal agency or Tribal government likely to be affected by the management action.

A second important aspect of research relates to the adaptive nature of the CWD plan. As management actions are completed and populations monitored for CWD exposure, results of

management actions and their success in containing and/or eliminating CWD must be monitored. Changes to the management plan by the CWD Task Force may be made based on these evaluations or on new scientific information regarding CWD.

RATIONALE FOR DECISION

FWP has been entrusted by the citizens of Montana with the preservation and management of our wildlife resources. Included in this mandate is the identification evaluation, and management of wildlife diseases and the effects that they have on the health of wildlife populations and consequently on the economy of Montana. In order to meet the goals of its statutorily mandated responsibilities, the Department set four specific project objectives for the CWD Management Plan. Each alternative in the draft EA was evaluated for its ability to achieve those objectives and for any potential significant affects the alternative might have on the human environment.

Objective #1: Prevent the introduction of CWD into Montana's free ranging deer and elk populations.

Objective #2: Minimize the spread of CWD beyond affected areas and reduce the incidence of the disease within affected populations if it is detected in Montana.

Objective #3: Provide timely, complete and accurate information about all aspects of CWD to personnel of participating agencies and to the public in Montana and throughout the United States.

Objective #4: Maintain an adaptive CWD surveillance program in Montana to allow for the early detection of CWD and to allow for evaluation of population involvement and management action success as the plan itself develops in response to CWD.

Options for the management of CWD are limited. No vaccine is available to prevent infection in susceptible animals and there are no known treatments for infected animals. The long incubation period, possible environmental contamination with a persistent pathogen, and an incomplete understanding of the routes of transmission limit options for control of CWD. Prevention of CWD in new areas and/or elimination of new "hot spots" of CWD infections have generally been the focus of action plans from states that have not found CWD within their borders. If hot spots can be identified through surveillance programs and population densities manipulated to reduce the geographic movement of infected animals and the resulting environmental contamination in a timely manner, wildlife professionals believe that there is a chance to control the spread of CWD or to potentially eliminate CWD. Once CWD has become established, however, eliminating the disease completely may prove to be difficult or impossible. Attempts to reduce the prevalence of CWD in affected areas or to completely eradicate the disease are being pursued in Colorado and Wisconsin, respectively. Those attempts may provide insight into control and management of CWD in affected wildlife populations in future years.

Prevention

The preferred alternative selected by FWP substantially increases preventative measures available to the state of Montana. While alternatives I and II made no changes in preventative measures, alternatives III, IV, V, and VI all called for similar and substantive changes to carcass transport regulations, baiting and feeding laws, movement of wild cervids into and within Montana, and carcass disposal.

The preferred alternative calls for establishing rules prohibiting carcass import rather than simply providing public education and recommendations for carcass transport. The public was given an opportunity to comment specifically on carcass transport regulations when a prohibition on importing heads and spinal cords into Montana from CWD affected states and provinces was placed in the big game tentative regulations in December of 2005. In February of 2006, the FWP Commission finalized those rules and prohibited the importation of heads and spinal columns from cervids harvested in states that have experienced CWD. Although this new rule may present some hardships to resident taxidermists or meat processors who have clients harvesting cervids from other states, additional business will be generated for resident taxidermists and meat processors when non-resident hunters harvest a trophy animal in Montana and are unable to take the whole (unmounted) head back to their state of origin due to carcass import restrictions. Currently, 25 states have restrictions concerning the import of cervid heads and spinal cords from states or areas of states that have experienced CWD.

Revisions to baiting and feeding laws concerning game animals is a preventative measure that will not only help in the prevention and/or transmission of CWD in cervid populations, but also will aid in addressing the urban wildlife problems that are occurring in many Montana cities. The FWP preferred alternative recommends the development of more substantive laws in Montana prohibiting baiting and feeding of big game and providing enforcement penalties for non-compliance with the prohibition. Those changes must be initiated through the legislature and could be addressed in the 2007 legislative session.

FWP instituted a policy change in the spring of 2005 concerning the movement of wild cervids within Montana. That policy change curtailed the rehabilitation of orphaned fawns and elk calves at the centralized rehabilitation facility in Helena. FWP determined at that time that the risk of spreading CWD through the existing rehabilitation and release program outweighed the benefits provided to Montana's wildlife populations. The current CWD management plan also curtails the translocation of wild cervids within Montana or from sources within or outside Montana. That prohibition will be instituted through policy changes made by the Director of FWP.

Finally, programs providing education and information regarding the proper disposal of carcass waste from harvested cervids will help protect our wildlife populations. Although alternatives III, V, and VI called for new regulations or laws concerning proper disposal of carcasses or carcass parts, an educational program was selected under the preferred alternative. Until CWD is discovered in Montana educational programs should adequately reduce the potential for improper disposal of carcasses that could contribute to the potential spread of CWD in Montana. These programs, coupled with appropriate communication and cooperation with the Department of Environmental Quality and the Department of Transportation should address the potential issues of environmental contamination as a potential source of CWD transmission.

Surveillance

FWP has maintained an excellent surveillance program since 1998 to detect the presence of CWD in Montana's wildlife. That program will be continued under the preferred alternative and will be supplemented through the increased collection of road-killed animal samples to monitor for CWD on a broad geographic basis. Surveillance will also be supplemented by educating the public and soliciting their help in informing FWP of any suspicious looking animals so that those "target samples" may be collected and tested for CWD.

While alternatives II and VI called for an expanded statewide surveillance of hunter-killed animals, the financial support for that expansion is not available at this time. Maintaining active surveillance in identified high-risk areas, with expanded geographical surveillance provided by testing of road-killed animals will provide a good alternative allowing general statewide surveillance of an easily obtainable sample set (road-killed animals) that has been shown to be a good indicator of CWD distribution. Concurrently, intensive sampling in identified high-risk areas will provide for rapid identification of CWD if it moves into Montana, as expected, from bordering states or provinces where it is currently found.

Disease Management

Based on public comments received, there was general support for aggressive management of CWD when it arrives in Montana. The most aggressive action possible, aggressive elimination, was presented in alternative VI of the CWD management draft. That alternative attempted total elimination of the cervid population within a minimum 5 mile radius of the first detected case of CWD in Montana. Attempts at aggressive elimination in Wisconsin, where CWD was first detected in 2002, have now been scaled back to attempts at population reduction to densities of 5 deer per mi² in the disease eradication zone and 10 deer per mi² in the herd reduction zone. Total elimination of cervids in a specific area is difficult to achieve, may increase the immigration of deer from surrounding areas into newly evacuated and potentially environmentally contaminated habitat, and would lessen potential for cooperation of private landowners or government agencies on whose land management actions may need to be initiated.

Alternatives IV and V also presented aggressive management actions predicated on an initial determination of CWD incidence in a defined population at a high statistical confidence level. Both of those actions achieve a population reduction through sampling that, depending on the area in Montana in which CWD is first found, may result in population reductions to densities less than the 5-10 deer per mi² targeted in Wisconsin's plan. While alternative IV calls for additional samples and therefore additional population reductions if the sample indicates a prevalence of >1% CWD positive animals, alternative V calls for additional samples if any CWD positive animals are found in the sample taken.

Effective management of CWD will be influenced by the environmental and social factors present in the area of the first CWD detection. Because of this, the FWP preferred alternative includes an initial "branch point" or "decision point" based upon an evaluation of these factors. Following the initial detection of CWD, an epidemiologic team will be established. The function of the epi-team is to evaluate information relative to the local cervid population density, distribution, and demographics; the land ownership and factors influencing access to lands for management actions; and the geographical barriers that may assist with management actions. The epi-team will make a recommendation to the Director of FWP based on their evaluation as to whether management for control (alternative IV) or statistical elimination (alternative V) of CWD is the appropriate fit to factors on the ground. The initial actions of both alternative IV and alternative V are identical. Both call for the radio-collaring and potential CWD testing of 50 cervids from the immediate area and tracking those animals for 6-9 months to determine home range. The epi-team will have an opportunity during this initial 6-9 month period to complete their evaluation and recommend management for control of CWD or for statistical elimination of CWD to the Director. Both of these management actions will make use of licensed hunters to the greatest extent possible to carry out the objectives of the plan.

The cooperation of the hunting public, private landowners, public agencies, licensed outfitters, meat processors, taxidermists, etc. will be essential to the success of the selected management action. Department efforts to solicit cooperation from all groups, agencies, and individuals involved in the prevention and management of CWD will continue.

SIGNIFICANCE OF IMPACTS: FINDING OF NO SIGNIFICANT IMPACT

Based on the following summary of effects (as discussed in the EA) FWP has determined that the alternative selected for prevention and management of CWD in Montana will not have significant long-term effects on the human environment. Short-term impacts on a localized area may occur and would include both beneficial and detrimental impacts. Long-term impacts in local areas are anticipated to be beneficial if successful in the eradication and/or reduction of CWD in an area. Statewide long-term impacts are also expected to be beneficial in that they would either eradicate CWD in Montana or prevent the spread of CWD to additional locations. Specific local impacts will vary due to the geographical, geological, and habitat characteristics in the location of the initial finding and subsequent findings of CWD in Montana. In each case, any detrimental impacts will be evaluated and mitigation measures put in place to reduce the level of significance of impacts if possible.

CWD has the capability to reduce deer, elk, and potentially moose populations within Montana causing significant biological, physical, social, economic, cultural, and aesthetic impacts. The prevention and management aspects of alternatives IV and V were evaluated in the draft environmental assessment not only for their potential to cause environmental impacts, but also in comparison with the impacts anticipated should CWD be allowed to enter Montana, become established and spread throughout cervid populations in the absence of any management actions.

The preventative aspects of the preferred alternative include actions prohibiting baiting and feeding of cervids as well as movement of live cervids. Preventative actions also restrict carcass transport and direct appropriate carcass disposal. No significant adverse environmental impacts were identified in the draft environmental assessment concerning those preventative aspects.

Management actions are taken annually in Montana in efforts to maintain deer and elk populations within the limitations of habitat availability. Montana FWP has established an “adaptive harvest management program” for both deer and elk. These programs require monitoring of deer and elk populations and provide specific “trigger points” for establishing various hunting regulation packages that will manipulate populations in specific areas. In many ways, the CWD management plan preferred alternative “dovetails” with the actions and intentions of these existing population management plans. Initial monitoring for CWD, discovery of disease, and determination of the prevalence of disease, all have built in trigger points that drive the CWD management plan to the succeeding level to either eliminate CWD or to prevent its distribution throughout cervid populations in Montana. While the adaptive harvest management program seeks to maximize the relationship of populations and available habitat, the CWD management plan seeks to minimize the opportunity for CWD to appear in Montana or to spread throughout Montana. The CWD management plan may reduce population levels below those that would be supported by existing habitat in an effort to contain an outbreak of CWD. In that regard, the actions directed under the CWD management plan preferred alternative will have short-term impacts on deer and elk populations. Those effects will be localized to management areas and are expected to be

reversible provided that CWD positive animals can be eliminated. In comparison, it is expected that taking no action upon the finding of CWD would have long term and irreversible impacts not only on a local basis, but also statewide.

As mentioned earlier, preferred alternative management actions will result in population reductions that may be above those normally achieved through the general big game season harvest dictated by the adaptive harvest management plan. Those population reduction efforts will initially supply an appropriate number of samples for CWD testing to enable the detection of CWD if it is present in 1% of the targeted population with a 99% confidence interval. Minor impacts are anticipated as a result of these sampling and/or population reduction efforts. While initial population reduction efforts may provide short term economic benefits in local areas through increased harvest activity, there could also be a reduction in hunter numbers in following years due either to the reduced number of available animals or to the loss of hunters who do not want to harvest an animal from an area identified as a CWD management zone. If CWD can be eliminated or controlled, however, the effected wildlife populations are expected to rebound resulting in a return of hunter numbers and a return of the local economic benefits of big game hunting to historical levels.

While there will be impacts resulting from the CWD management plan, in particular the portion of the plan requiring population reductions for CWD surveillance and control needs, those impacts identified through the draft environmental assessment were determined to have only minor environmental impacts that, if the management plan is successful, would be short term.

CWD MANAGEMENT PLAN FUNDING

All of the activities included in this management plan will require manpower and financing. Currently, the CWD surveillance program is financed through a \$26,000 allocation from the general license fund and \$90,000 from the USDA/APHIS/Veterinary Services based on Montana's identification as a Tier II CWD state. Those monies are only adequate to cover the expense of operating the current surveillance program and will not provide for an increase in road-killed sampling as recommended by the preferred alternative.

Should a management action be required in Montana, the plan would be a long-term commitment requiring at least 5 years of intensive monitoring, an initial statistical sampling, and a potential population reduction effort. Multiple management actions could be required in different areas of the state increasing the financial and manpower commitment.

Initial population evaluation efforts in a management area would require trapping and radio collaring 50 animals and monitoring those animals over a 9-month period at an estimated cost of \$200,000. Following initial evaluation of the affected population, a statistical sampling effort would be necessary to determine the incidence of CWD in the population. Costs of this operation would depend heavily upon the delineated boundaries of the affected population and the population estimation within the boundaries. As an example, a population estimate of 2000 cervids within the management area boundary would require the lethal collection of 410 animals for analysis. Depending on available methods of collection (hunter collection, agency collection, etc.) and the needs for processing, holding, or disposal of carcasses and carcass parts, this type of operation, including manpower and equipment, is estimated to cost between \$500,000 and \$1,000,000. In comparison, Wisconsin spent \$11 million in the first year of CWD management in

their effort to eliminate CWD from their “disease eradication zone” and prevent the spread of CWD in Wisconsin.

Finally, an effort to control CWD in a “hot spot” in Montana would be a commitment to spending over a 5-year period. Multiple hot spots may be identified in Montana resulting in multiple management actions undertaken concurrently. If CWD is found in Montana, the state will move to a tier 1 status under the USDA/APHIS cooperative agreement. Tier 1 status provided funding of \$280,000 to tier 1 states in 2005. The future of that funding and the amounts available will depend upon the number of states that experience CWD (with funding amounts potentially reduced as the number of states involved increases) and upon appropriation of additional federal funding for CWD control.

Additional funding sources must be identified and budgeted to provide the necessary finances should a management action, or multiple management actions, be required in Montana. Emergency appropriations from the general license fund, general license fee increases to provide CWD management funding, or legislative action providing funding from the state general fund have been suggested.

In adopting the preferred alternative for prevention and management of CWD in Montana, the FWP has evaluated a number of alternatives currently being used by other states in an attempt to select the alternative best suited to our current conditions. The adaptive nature of the selected alternative will allow us not only to make final decisions concerning management based on the site of Montana’s first CWD occurrence, but also to adapt the management plan based on the constantly evaluated outcome of our own management actions as well as the actions being taken in other states. At the same time, the management plan will seek to prevent the introduction of CWD into Montana. Our best hopes lie in the cooperation of the citizens and sportspersons of Montana to assist in the prevention and management aspects of this plan.

M. Jeff Hagener
Director, Montana Fish, Wildlife & Parks

Date

This CWD Management Plan and the Decision Notice were presented to and concurred with by the FWP Commission at their June 6, 2006 meeting.